

U.S. Patent Application Serial No. 09/960,401
Amendment dated January 29, 2004
Reply to OA of August 29, 2003

REMARKS

Claims 1-8 are currently being examined. No new claims have been added. No new matter has been added.

The Examiner has objected to the disclosure because of various informalities. Applicant has amended the disclosure at page 3 to change “is consist” to --consists--. Applicant has amended the disclosure at pages 29 and 37 to change “Irgacure” to --IRGACURE--.

Thus, Applicant respectfully submits that this objection should be withdrawn.

Claims 1, 2, and 4-6 stand rejected under 35 USC 103(a) as being obvious over USP 6,277,529 (**Marumoto**) in view of USP 6,048,924 (**Obayashi**).

Applicant respectfully traverses this rejection.

One having ordinary skill in the art would not have combined **Marumoto** and **Obayashi** to arrive at the present invention. Applicant respectfully submits that the combination of **Marumoto** and **Obayashi** proposed by the Examiner is unreasonable, unlikely, and improper for the following reasons.

(1) **Marumoto** discloses a method of manufacturing color filters by an ink jet printing method. As a resin for the ink, an acrylic resin and a melamine resin are disclosed among many other resins (column 7, lines 36 to 47). However, no amino resin having a carboxyl group and/or a phenolic hydroxyl group is disclosed in **Marumoto**.

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(2) On the other hand, **Obayashi** discloses a water-borne resin composition comprised of amino resin (A) obtained from amino compound (a) comprising at least one carboxyl group in a phenyl group of benzoguanamine, and water-borne resin (B) having a functional group reactive with the amino resin (A). This water-borne resin composition can be used in inks. Since the object of **Obayashi** is to provide an amino resin which can replace conventional cross-linking agents, the amino resin (A) is considered as a cross-linking agent to crosslink the water-borne resin (B). As examples of the amino resin (A), an amino resin is disclosed which is obtained by an addition reaction of aldehyde compound (b) to amino compound (a), and then by etherificating with monohydric alcohol compound (c). Another example of the amino resin (A) is disclosed which is obtained from amino compound (a) and urea, melamine, benzoguanamine, cyclohexanecarboguanamine, steroguanamine, acetoguanamine, phthaloguanamine, or spiroguanamine. In addition, acrylic resin is cited as an example of the water-borne resin (B).

It appears that the Examiner believes that the present claimed invention can be achieved by substituting the amino resin in **Obayashi** for "acrylic resin; melamine resin; polymer containing hydroxyl group or carboxyl group and melamine" in **Marumoto**. However, the amino resin in **Obayashi** is used as a cross-linking agent, and therefore a water-borne resin (B) is essential as a base resin to be crosslinked according to **Obayashi**. Accordingly, one having ordinary skill in the art would not have been motivated to use the cross-linking agent of **Obayashi** in place of the resin in **Marumoto**.

(3) Moreover, **Obayashi** discloses neither use of the amino resin in inks for ink jet

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printing nor use thereof in inks for color filters.

In view of the foregoing, **Marumoto** and **Obayashi** do not disclose or teach, alone or in combination, the features set forth in claim 1 of "a method of producing a color filter, which comprises forming pixels on a transparent substrate using a colored composition containing (a) an amino resin having a carboxyl group and/or a phenolic hydroxyl group and (b) a coloring material by an ink-jet printing method, followed by curing the pixels."

Thus, Applicant respectfully submits that this rejection should be withdrawn.

Claims 3 and 7 stand rejected under 35 USC 103(a) as being obvious over **Marumoto** in view of **Obayashi** and USP 5,055,113 (**Larson**).

Applicant respectfully traverses this rejection.

One having ordinary skill in the art would not have combined **Marumoto**, **Obayashi**, and **Larson** to arrive at the present invention.

The Examiner proposes and relies on a combination of **Marumoto** and **Obayashi** in this rejection, and then attempts to utilize **Larson** in conjunction with the combination of **Marumoto** and **Obayashi**.

However, the combination of **Marumoto** and **Obayashi**, as proposed by the Examiner, is unreasonable, unlikely, and improper for the reasons discussed in detail herein above.

Larson describes abrasive product having binder comprising an aminoplast resin.

In view of the foregoing, **Marumoto**, **Obayashi**, and **Larson** do not teach, alone or in

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combination, the features set forth in base claim 1 of “a method of producing a color filter, which comprises forming pixels on a transparent substrate using a colored composition containing (a) an amino resin having a carboxyl group and/or a phenolic hydroxyl group and (b) a coloring material by an ink-jet printing method, followed by curing the pixels.”

Thus, Applicant respectfully submits that this rejection should be withdrawn.

Claim 8 stands rejected under 35 USC 103(a) as being obvious over **Marumoto** in view of **Obayashi** and USP 5,552,192 (**Kashiwazaki**), further in view of either USP 5,821,277 (**Hirayama**) or USP 5,821,016 (**Satoh**).

Applicant respectfully traverses this rejection.

One having ordinary skill in the art would not have combined **Marumoto**, **Obayashi**, and **Kashiwazaki** with either **Hirayama** or **Satoh** to arrive at the present invention.

The Examiner proposes and relies on a combination of **Marumoto** and **Obayashi** in this rejection, and the attempts to utilize **Kashiwazaki** and either **Hirayama** or **Satoh** in conjunction with the combination of **Marumoto** and **Obayashi**.

However, the combination of **Marumoto** and **Obayashi**, as proposed by the Examiner, is unreasonable, unlikely, and improper for the reasons discussed in detail herein above.

Kashiwazaki describes color filter and method for manufacturing, **Hirayama** describes thermosetting and procuring compositions for color filters and method for making the same, and **Satoh** describes colored image forming material and color filter obtained therefrom.

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In view of the foregoing, the above five references (**Marumoto, Obayashi, Kashiwazaki, Hirayama, Satoh**) do not disclose or teach, alone or in combination, the features set forth in base claim 1 of “a method of producing a color filter, which comprises forming pixels on a transparent substrate using a colored composition containing (a) an amino resin having a carboxyl group and/or a phenolic hydroxyl group and (b) a coloring material by an ink-jet printing method, followed by curing the pixels.”

Thus, Applicant respectfully submits that this rejection should be withdrawn.

Claims 1-8 stand rejected under 35 USC 103(a) as being obvious over U.S. Patent No. 6,524,757 (**Koike**) in view of U.S. Patent No. 6,143,450 (**Sobue**).

Applicant respectfully traverses this rejection.

Subject matter which may have been prior art under former 35 USC 103 via 35 USC 102(e) is now disqualified as prior art against the claimed invention if that subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person (see MPEP 706.02(l)(1)).

U.S. Patent Application Serial No. 09/960,401 and U.S. Patent No. 6,524,757 (**Koike**) were, at the time the invention of U.S. Patent Application Serial No. 09/960,401 was made, jointly owned by Dainippon Ink and Chemicals, Inc.

In view of the foregoing, **Koike** is not available to be applied as prior art against the claims of the present invention.

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Thus, Applicant respectfully submits that this rejection should be withdrawn.

Claims 1-8 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5-8 of **Koike** in view of **Sobue**.

Applicant respectfully traverses this rejection.

The Examiner has noted that “A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application.”

Applicant submits herewith a terminal disclaimer fee, along with a terminal disclaimer to obviate the double patenting rejection over the prior patent **Koike**.

Thus, Applicant respectfully submits that this rejection should be withdrawn.

Accordingly, all pending claims are believed to be in condition for allowance, which action, at an early date, is respectfully requested.

If the Examiner feels that this application is not currently in condition for allowance, the Examiner is requested to contact Applicant’s undersigned attorney at the telephone number indicated below to arrange for a telephone conference to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time, and any other

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fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosures: Petition for Extension of Time
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